

REMARKS

By this Amendment, Claims 1 and 16 have been amended, to place this application in immediate condition for allowance.

In the outstanding Office Action, the Examiner has rejected Claims 1, 4, 5, 6, 12, 13, 16 and 21 under 35 U.S.C. 102(b) as allegedly being anticipated by U.S. Patent No. 5,502,568 to Ogawa et al. The Examiner has gone into detail as to the reasons in support of this ground of rejection. However, concerning Ogawa et al., their detector is a two-dimensional array to image a pattern and measure angle of incidence in two dimensions. By contrast, the present invention contemplates a one-dimensional light detector in combination with a two-dimensional mask used to determine the angular position of a radiating point source in two dimensions. In the Office Action, the Examiner makes reference to Figure 10 and the light detector identified by reference numeral 53. As is clear from Figure 10 and the associated specification, (column 14, beginning at line 42), the detector 53 of Ogawa et al. is described as a "CCD area image sensor ...". The sensor 53 is two-dimensional. This is to be contrasted with the sensor disclosed by Applicant which consists of a one-dimensional detector. In this regard, reference is made to each of the figures in the present application, particularly Figures 2, 3, 4, 5 and 7, each of which clearly shows the inventive light detector array to be one-dimensional.

Accordingly, in order to clearly patentably distinguish the claims from Ogawa et al. under 35 U.S.C. 102, independent Claims 1 and 16 have been amended to specify that the light detector is "one-dimensional." As such, Claims 1, 4, 5-6, 12-13 and 16-21 are free of anticipation from Ogawa et al.

The Examiner has also rejected Claims 2-3, 14-15 and 22 under 35 U.S.C. 103(a) as allegedly being unpatentable over Ogawa et al. in view of U.S. Patent No. 4,092,072 to Ellis. In taking this position, the Examiner has relied upon Ellis for the alleged teaching of pseudo-random sequences of V-shapes as allegedly illustrated in Figure 1. Regarding this ground of rejection, it is noted that Ellis does, in fact, teach the use of a single V-shaped aperture 39 that forms a simple image on a one-dimensional detector. However, that V-shaped aperture is not a sequence of V-shapes but, rather, is a single V-shaped aperture. It is respectfully submitted that a single V-shaped aperture is not readable on the limitation "a two-dimensional pseudo-random surface pattern defining a prescribed degree of transmissivity." This limitation is found in both independent Claims 1 and 16.

Concerning Claim 1, it is noted that there is no teaching or suggestion to provide Ogawa et al. with a one-dimensional detector other than in Applicant's own disclosure. The hindsight reconstruction of the prior art in light of Applicant's own disclosure is a practice forbidden in patent law. Thus, it is not seen how Ogawa et al. and Ellis are combinable under 35 U.S.C. 103 concerning independent Claim 1.

Concerning independent Claim 16, that claim includes the further limitation that the surface pattern comprises "a plurality of V-shapes at least some of which partially overlap one another." This structure is nowhere taught or suggested by Ellis or Ogawa et al. The only place where the Examiner could go for the suggestion to combine Ogawa et al. with Ellis and provide the further structure of a plurality of at least partially overlapping V-shapes is in Applicant's own disclosure. Accordingly, for this additional reason, it is submitted that the claims as now presented patentably distinguish from the teachings of Gawa et al. and Ellis.

Moreover, Ogawa et al. specifically disclose a manner of analyzing an image that requires a two-dimensional detector array. Reference, in this regard, is made to column 15, beginning at line 31:

“In the CCD area image sensor 53, image signal as shown in FIG. 12 is obtained by projection of the pattern shown in FIG. 11 and then information with respect to the axes perpendicular to each other is removed by integrating values of pixel signals in the directions of the X and Y axes individually so that the pixel signals can be converted into the same signal as in the first embodiment.”

Thus, Ogawa et al. fail to contemplate the teachings of the present invention in which a one-dimensional light detector is employed.

For these reasons, it is respectfully submitted that the claims as now amended patentably distinguish from the prior art applied thereagainst in the outstanding Office Action. In the application as filed, Claims 2-15 are dependent from independent Claim 1 and Claims 17-22 are dependent from independent Claim 16. As such, for the same reasons set forth above with regard to Claims 1 and 16, the dependent claims are believed equally patentable.

Applicant acknowledges, with appreciation, the Examiner's indication of the allowability of Claims 7-11 and 17-20 were they to be rewritten in independent form. However, based upon the amendments and remarks set forth above, it is respectfully submitted that rewriting those claims in independent form is not necessary to obtain allowance of the application.

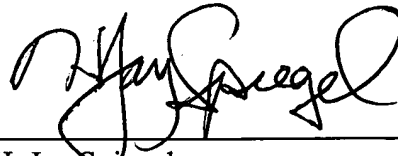
Accordingly, reconsideration and allowance of this application are respectfully solicited.

If, for any reason, the Examiner believes that an interview with Applicant's Attorney would be helpful in expediting the prosecution of this patent application, the Examiner is respectfully requested to telephone Applicant's Attorney locally at (703) 619-0101 so that a discussion of any outstanding issues may be had.

Again, reconsideration and allowance of this application are respectfully solicited.

Respectfully submitted,

H. JAY SPIEGEL & ASSOCIATES

A handwritten signature in black ink, appearing to read "H. Jay Spiegel", written over a horizontal line.

H. Jay Spiegel
Attorney for Applicant
Registration No. 30,722

H. JAY SPIEGEL & ASSOCIATES
P.O. Box 11
Mount Vernon, Virginia 22121
(703) 619-0101 - Phone
(703) 619-0110- Facsimile